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| <b>INFORMATION DISCLOSURE<br/>CITATION</b><br><br>PTO-1449                    |   |       | ATTORNEY'S DKT NO.<br>024444-580     |                 | APPLICATION NO.<br>09/214,923   |             |                |
|   |   |       | APPLICANT<br>Mats WALDENSTRÖM et al. |                 |                                 |             |                |
|   |   |       | FILING DATE<br>January 15, 1999      |                 | GROUP<br>Unassigned <b>1375</b> |             |                |
| <b>U.S. PATENT DOCUMENTS</b>  |   |       |                                      |                 |                                 |             |                |
| EXAMINER'S<br>INITIALS  | PATENT NO.  | DATE  | NAME                                 | CLASS           | SUBCLASS                        | FILING DATE |                |
| <i>SH</i>   | 5,529,804   | 06/96 | Bonneau et al.                       |                 |                                 |             |                |
|   | 5,505,902   | 04/96 | Fischer et al.                       |                 |                                 |             |                |
|   | 5,674,564   | 10/97 | Ljungberg et al.                     |                 |                                 |             |                |
|   | 4,923,512   | 05/90 | Timm et al.                          |                 |                                 |             |                |
|   | 3,660,050   | 05/72 | Her et al.                           |                 |                                 |             |                |
|   | 5,068,149   | 11/91 | Shimada et al.                       |                 |                                 |             |                |
|   | 5,288,676   | 02/94 | Shimada et al.                       |                 |                                 |             |                |
|   | 5,334,561   | 08/94 | Matsui et al.                        |                 |                                 |             |                |
| <i>SH</i>   | 5,434,112   | 07/95 | Matsui et al.                        |                 |                                 |             |                |
| <b>FOREIGN PATENT DOCUMENTS</b>   |   |       |                                      |                 |                                 |             |                |
| EXAMINER'S<br>INITIALS  | PATENT NO.  | DATE  | COUNTRY                              | CLASS           | SUBCLASS                        | Translation |                |
|   |   |       |                                      |                 |                                 | Yes         | No             |
| <i>SH</i>   | 346 473   | 01/30 | Great Britain                        |                 |                                 |             | X              |
| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b> |   |       |                                      |                 |                                 |             |                |
| <i>SH</i>   | Dialog Information Services, File 351, DERWENT WPI, Dialog Accession No. 010155859, WPI Accession No. 95-057111/199508, (NGK SPARK PLUG CO LTD), "Tungstencarbide-base cemented carbide used for cutting tool - comprises hard phase having specified particle size distribution, and contg tungsten carbide and ferrous metal bonding phase", & JP,A,6335808, 19941206, 199508 B (no date/month) |       |                                      |                 |                                 |             |                |
| <i>SH</i>   | Dialog Information Services, File 351, DERWENT WPI, Dialog Accession No. 011397725, WPI Accession No. 97-375632/199735, (KOBE STEEL LTD), "Hard tough cemented carbide - comprises mainly tungsten carbide, cobalt and nickel", & JP,A,9125185, 19970513, 199735 B (no date/month)  |       |                                      |                 |                                 |             |                |
| <i>SH</i>   | Dialog Information Services, File 351, DERWENT WPI, Dialog Accession No. 011172064, WPI Accession No. 97-149989/199714, (DIJET IND CO LTD), "Sintered hard material for water jet or wire drawing die nozzles - comprises iron, cobalt, and/or nickel, carbide and/or carbonitride of Gp-IVA transition metal, and tungsten carbide", & JP,A,9025535, 19979128, 199714 B (no date/month)          |       |                                      |                 |                                 |             |                |
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| EXAMINER  | <i>Time</i>   |       |                                      | DATE CONSIDERED |                                 |             | <i>5/20/00</i> |

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| <b>INFORMATION DISCLOSURE<br/>CITATION</b><br><br>PTO-1449                    |   |      |         | ATTORNEY'S DKT NO.<br>024444-580     |          | APPLICATION NO.<br>09/214,923               |  |
|   |   |      |         | APPLICANT<br>Mats WALDENSTRÖM et al. |          |   |  |
|   |   |      |         | FILING DATE<br>January 15, 1999      |          | GROUP<br><del>Unassigned</del> <b>(775)</b> |  |
| <b>U.S. PATENT DOCUMENTS</b>  |   |      |         |                                      |          |   |  |
| EXAMINER'S<br>INITIALS  | PATENT NO.  | DATE | NAME    | CLASS                                | SUBCLASS | FILING DATE                                 |  |
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| <b>FOREIGN PATENT DOCUMENTS</b>   |   |      |         |                                      |          |   |  |
| EXAMINER'S<br>INITIALS  | PATENT NO.  | DATE | COUNTRY | CLASS                                | SUBCLASS | Translation<br>Yes   No                     |  |
|   |   |      |         |                                      |          |   |  |
| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b> |   |      |         |                                      |          |   |  |
| <b>g</b>  | Dialog Information Services, File 351, DERWENT WPI, Dialog Accession No. 008723156, WPI Accession No. 91-227173/199131, (TOSHIBA TUNGALLOY KK), "Coated sintered hard alloy for intermittent cutting - has single or multilayers of ceramics on matrix of tungsten carbide or gp-IVA, gp-VA or gp-VIA carbide(s) or carbonitride(s)", & JP,A,3146677, 19910621, 199131 B <b>(no date/month)</b> |      |         |                                      |          |   |  |
| <b>l</b>  | Dialog Information Services, File 351, DERWENT WPI, Dialog Accession No. 008551086, WPI Accession No. 91-055137/199108, (HITACHI TOOL KK), "Super-hard alloy prodn. - comprises hard phase of titanium-carbide, titanium-nitride and tungsten carbide and binder phase of iron-Gp. metal", & JP,A,3006349, 19910111, 199108 B <b>(no date/month)</b>  |      |         |                                      |          |   |  |
| <b>l</b>  | Dialog Information Services, File 351, DERWENT WPI, Dialog Accession No. 004689404, WPI Accession No. 86-192746/198630 (HITACHI CHOKO KK), "Ultrafine particles sintered hard alloy - comprises tungsten carbide hard phase bonded with iron and chromium gp elements contg. carbide(s)", & JP,A,61124548, 19860612, 198630 B <b>(no date/month)</b>  |      |         |                                      |          |   |  |
| <b>g</b>  | Dialog Information Services, File 351, DERWENT WPI, Dialog Accession No. 004675229, WPI Accession No. 86-178571/198628, (HITACHI CHOKO KK et al.), "Hard alloy useful for cutting tools etc. - comprises hard phase contg. tungsten carbide, and binder metal phase contg. iron-gp. and chromium-gp. elements", & JP,A,61110745, 19860529, 198628 B <b>(no date/month)</b>                      |      |         |                                      |          |   |  |
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| EXAMINER<br><b>Turner</b>   |   |      |         | DATE CONSIDERED<br><b>5/20/00</b>    |          |   |  |

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